Certificate no.:
TAK00002NW

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Insulation Materials for Gas Carriers

with type designation(s)
Corner Panels and Primary Blocks

issued to
NMG Composites Co., Ltd.
Jiaxing, Zhejiang Province, China

is found to comply with
Gaztransport & Technigaz Specification Nr. M3106, MarkIII: Corner Panels Prefabricated Elements, Rev. 09, September 2017
Gaztransport & Technigaz Specification Nr. M3113, MarkIII: Primary Block Assembly Prefabricated Elements, Rev. 04, January 2015

Application:

For the use in Gaztransport & Technigaz (GTT) MARK III/FLEX Cargo Containment System (CCS) technologies of Liquefied Gas (LG) carriers.

Issued at **Hamburg** on **2026-04-01**
This Certificate is valid until **2031-03-31**.
DNV local unit: **Shanghai**

for **DNV**

Approval Engineer: **Gisle Hersvik**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

Corner Panels and Primary Blocks

Place of manufacture

NMG Composites Co., Ltd., 111 XinZhong Road, Chongfu, Tongxiang, Jiaxing Zhejiang, 314511, P.R. China

Application/Limitation

For use in MARK III/FLEX Cargo Containment System (CCS) technologies.

The material is only approved for use in Cargo Containment System (CCS) technologies of Liquefied Gas (LG) carriers built under license from GAZTRANSPORT & TECHNIGAZ SAs (GTT).

Materials and components used in manufacturing of Corner Panels and Primary Blocks shall be in accordance with relevant GTT specifications.

Deliveries to actual shipbuilding projects shall be in compliance with the relevant GTT Specification:
- Nr. M3106 “MarkIII: Corner Panels Prefabricated Elements”, Rev. 09 dated September 2017.
- Nr. M3113 “MarkIII: Primary Block Assembly Prefabricated Elements”, Rev. 04 dated January 2015.

The product shall have a valid approval from GTT and the conditions stated in the approval to be adhered to.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**.

Marking of product

Product/package shall be marked with the *manufacturer’s name*: **NMG Composites Co., Ltd., China**, or *manufacturer’s identification letter(s)*, *Lot No.*, *Size*, *Quantity*, and *type designation*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com

END OF CERTIFICATE